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NAVY DEPARTMENT

BUMED NEWS LETTER

a digest of timely information

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Conference on Streptomycin: When the Food and Drug Administration was asked recently to supervise the standards of streptomycin for Army and Navy procurement, it became apparent that little information on this subject had been collected. The National Research Council's Committee on Chemotherapeutic

and Other Agents was therefore requested to call a conference on specifications for preparation of streptomycin.

Since small quantities of streptomycin have now been prepared in pure crystalline form, it was decided that, in the future, dosage will be in terms of metric weight rather than in units. By good fortune, 1 microgram of streptomycin base corresponds closely to 1 S unit of activity as developed by Waksman, and used hitherto. One milligram, therefore, is approximately equivalent to 1000 S units. The hydrochloride salt, now most commonly used, will serve as a reference standard, but potency will be in terms of the pure base, not of any salt.

Assay methods now in use include the cup, the turbidimetric, the dilution, and the agar-diffusion technics, and several different gram-negative organisms are used as test strains. Probably the most popular assay method is the agar-diffusion technic, but it was decided to allow commercial firms to use their own methods, subject to check by the Food and Drug Administration.

The stability of streptomycin is such that it was recommended not to require refrigeration for storage but to insist on a temperature not in excess of 25° C. With a moisture content not over 3 per cent and a pH between 6.0 and 7.5, material at this temperature may be given an expiration date of 9 months. Sterility tests are difficult because of the lack of anything that will satisfactorily inactivate streptomycin. However, 0.1 per cent hydroxylamine and an as yet unidentified material from a culture of soil bacillus both show some promise.

The most common toxic manifestations in humans (nausea, headache, and fainting) can be correlated with a histamine-like impurity in some commercial lots of streptomycin. A depressor test in cats was recommended to prove that this material had been adequately removed. A test for pyrogens, using rabbits, and a test for essential nontoxicity, using mice, were also specified.

Dr. Chester Keefer reviewed the latest clinical information. Subcutaneous or intramuscular administration is satisfactory, using material containing 50 mg. per c.c. of pure base. Intravenous administration has no significant advantage and favors the likelihood of reactions. Adequate blood levels are generally maintained for 6 hours. A total of 50 mg. may be safely given intrathecally during 24 hours. Oral doses do not result in appreciably high levels in the blood, but may have a significant effect on intestinal pathogens. Usual parenteral dosage schedules are from 1.0 to 4.0 Gm. of pure base, daily.

Streptomycin has been recommended for trial in gram-negative infections of the urinary tract after spinal injury, and for other gram-negative infections which have been proved to be penicillin resistant but streptomycin sensitive.

It seems to be effective in tularemia and in influenzal meningitis. Results with experimental tuberculosis in animals have been promising, but human trials have shown that prolonged courses of treatment and observation will be required before any assessment can be made.

Commercial production of streptomycin is now only slightly over 3 kg. a month of the pure base, and Army and Navy needs total 54 kg. monthly. It will therefore be some time before any significant amount is available, even for experimental use, by civilians. (National Research Council, Washington, D.C., Aug. 15, '45 - CMR Bulletin #55)

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Fatty Changes in the Liver of Monkeys Receiving Streptomycin: A study was undertaken to determine whether fatty metamorphosis observed in the liver and kidneys of monkeys following streptomycin is permanent or reversible after the administration of streptomycin is discontinued. Eight monkeys received a daily dose of 25,000 units of pure streptomycin in 3 divided doses for 5 consecutive days, and were sacrificed in pairs at the end of this period and after additional observation periods of 10 days, 1 month and 2 months. Tests of liver and kidney function, hematologic examinations, determination of blood urea levels and complete chemical and microscopic analyses of the urine were performed daily during the first 15 days, and at weekly intervals thereafter.

Only minor and transient functional changes were found and all animals appeared to remain healthy. Upon autopsy, the monkeys sacrificed 1 day after the last administration of streptomycin showed a moderate amount of fat in the liver, but none in the kidneys. After 10 days, fat in the same or slightly larger amounts was still present in the liver, and fat was also found in the kidney. After 30 days it had completely disappeared from the latter and was definitely decreased in the liver; after 60 days all pathological changes had disappeared. (OEMcmr-544, Molitor, Merck Inst., CMR Bulletin #53)

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Prevention and Treatment of Accidental Poisoning by Rodenticides: Instructions for the prevention of certain tropical and exotic diseases have emphasized the importance of the control of rodents. Where it has been necessary to effect rapid and maximal elimination of these animals, control programs have been carried out by trained naval personnel using rodenticides of high toxicity. When poisons are used, there is always danger of accidental poisoning of humans.

When a control program is undertaken, medical officers should be familiar with the rodenticides in use, the precautionary measures to be taken in handling

them, and the recommended antidotes. Factors to be avoided are contamination of the ground-water supply by poisoned baits scattered over wet ground, secondary poisoning from eating animal victims of certain rodenticides and inhalation of poisonous dusts during packaging and handling of the rodenticides. Personnel detailed to mixing of baits in the field should wear gloves when mixing bait and they should bathe thoroughly afterwards. Utensils used in mixing bait should never be returned to the galley or to other places where food is prepared. Rodent-control crews should have their own equipment and utensils appropriately painted with "Poison" markings. Where practicable, scales should be provided exclusively for rodenticide mixing in order to discourage "overdosing" and unscientific work. The dangers of carelessness cannot be overemphasized and rodent control teams should be warned that mistakes are likely to be disastrous.

In addition to the commonly known poisons such as arsenic and phosphorus, there are others in use that require strict supervision and special precautions. Their important properties, potential dangers and antidotes are summarized below.

"1080" or Sodium Fluoroacetate is a highly toxic compound recently developed and adopted for rodent control work. Field trials and investigations have been under way for several months to determine the most effective method of use and the best bait mixtures. Available evidence indicates that it is a very practical and extremely potent rodenticide which is cheaper and more readily obtainable than thallium sulfate.

For security reasons, the U. S. Fish and Wildlife Service has adopted the symbol "1080" to designate sodium fluoroacetate. The formula and other information pertaining to this compound are held as restricted and they have the same status as DDT. "1080" has not been released for general public use and its manufacture is restricted because of its extremely dangerous potentialities. Serious objection to its use is the fact that recommended antidotes are based mainly on theoretical considerations and no specific antidote is known. No reports on treatment of cases of accidential poisoning are available.

The Navy has distributed an experimental supply of "1080" to a few experienced rodent-control officers on duty in the Pacific area, with instructions for conducting carefully controlled field trials. Wherever it is used, the medical officer should be cognizant of the way it is stored, handled and applied.

Dogs, more than any other animal, are susceptible to poisoning by "1080". Rodents that have been killed by "1080" must be kept out of reach of dogs, other pets and domestic animals.

"1080" is available in a finely powdered form. It is white in color, and has no odor or other characteristic property. It is chemically stable under all usual conditions, is non-irritating and non-toxic on the unbroken skin, is not inflammable and is not volatile. It may be absorbed through the skin in the presence of water and it may enter through cuts or abrasions. The hands should be protected by gloves in mixing and distributing baits.

Experiments using monkeys suggest that the lethal dose is 700 mg. for a 70 kg. man. It is estimated that 70 mg. will produce toxic effects. The lethal dose for man in terms of bait used for rats is estimated to be about 6 ounces.

Fluoroacetate is believed to be a specific enzyme poison inhibiting acetate metabolism of plants and animals. Experiments using animals have demonstrated toxic action on the myocardium and on the central nervous system. Among primates, the effect on the heart is the primary cause of death. It is assumed that humans will suffer cardiac failure, although convulsions may appear first.

The action on the heart is first manifested by the occurrence of pulsus alternans. Later, premature systoles appear and death eventually results from ventricular fibrillation. The action on the central nervous system usually results in epileptiform convulsions.

For immediate treatment and first aid of victims of poisoning, vomiting should be induced by gagging and by giving salt water. The patient should be put at complete rest and central excitation should be controlled with barbiturates. Sodium amytal, used intravenously if necessary, is suggested as the most appropriate drug. The cardiac status of the patient should be followed by repeated electrocardiograms. Evidence of arrhythmia or marked changes in the shape of the T-wave should be watched for. In experimental animals, the intracardiac injection of 5 c.c. of a 1 per cent solution of procaine hydrochloride has sometimes arrested ventricular fibrillation and this heroic procedure may be indicated if fibrillation occurs. When symptoms of the acute phase are controlled, the patient may appear to have recovered in from 12 to 24 hours. Thorough examination should be made for myocardial damage and, if present, complete bed rest must be continued.

Thallium Sulfate (Thallous sulfate, Tl_2SO_4) is a cumulative poison of high toxicity without taste, odor or other characteristic property. It is prepared mainly as a by-product from the flue dusts in industrial plants producing sulfuric acid by the oxidation of pyrites. It is extremely toxic to all forms of life.

Thallium sulfate and other thallium salts are soluble in water and are readily absorbed, even through the skin. The lethal dose has been estimated to be 1,400 mg. for a 70 kg. man. It is known, however, that 1/4 of this

amount will produce severe toxic effects, and repeated doses have a cumulative action. For rodent control work, thallium sulfate is commonly used in a ration of 1 part by weight of Tl_2SO_4 to 65 parts of bait. The lethal dose for man, in terms of rodent bait used in the field, is estimated to be 3.2 ounces.

It is customary to dissolve and to mix thallium sulfate with bait in hot water. The mixture should not be permitted to boil, as the fumes thus released are dangerous. The hands should be protected by gloves in mixing and distributing baits.

Thallium acts as a slow poison when ingested or handled carelessly. However, in accidental poisoning by a single lethal dose death may occur in 24 hours, chiefly from hemorrhagic gastro-enteritis and respiratory failure. The course may be much slower, even with a single dose, characterized by severe nervous symptoms and gradual decline. Signs of polyneuritis and gastric irritation may suggest poisoning by a heavy metal. In addition, manifestations of slow poisoning may include loss of hair, diuresis, persistent albuminuria, and degenerative changes in the endocrine and other organs.

Treatment should be started immediately. Procedures to be followed include: (1) emptying of the stomach followed by repeated lavage with dilute sodium iodide solution; (2) administration of a high enema of a thin suspension of bismuth subgallate; (3) intravenous administration of from 15 to 30 c.c. of 2.3 per cent solution of sodium iodide; (4) intravenous administration, daily, of 50 c.c. of a 50 per cent glucose solution; (5) a diet to protect against corrosive ulceration, such as one with a high intake of milk, barley or oat gruel; (6) oral administration of 10 c.c. of calcium gluconate or calcium lactate every second day; (7) symptomatic treatment to relieve extreme pain, restlessness and sleeplessness, and to stimulate glandular function; (8) daily urinalysis, with treatment adjusted to the degree of thallium elimination.

Zinc phosphide (Zn_3P_2) is a poison having several distinguishing properties including a coal black color, and a disagreeable taste and odor. Accidental poisoning of humans is considerably less frequent than with thallium sulfate and "1080" because of its distinguishing physical properties and less toxic nature. The lethal dose for a 70 kg. man is estimated to be 2,800 mg. The lethal dose for man in terms of rodenticide bait is about 5 ounces.

Precautions should be observed against inhalation of zinc phosphide dust during handling, since inhalation in concentrated amounts may be dangerous. Zinc phosphide when mixed with oils having an acid pH, such as vegetable oils, will liberate phosphine. Shipment to forward areas in large bulk containers presents a hazard if containers are broken and stored for protracted periods of time, since phosphine gas may be liberated under certain conditions.

For first-aid treatment of victims following ingestion of zinc phosphide: (1) induce vomiting by gagging or giving powdered mustard in water; (2) give an oxidizing agent such as potassium permanganate (1-1000 solution of water), or a 1 per cent solution of hydrogen peroxide; (3) after 1 hour, give Epsom salts for catharsis. Do not give milk, lard or other oils, as these will increase phosphorus absorption.

Antu (alphanaphthathiourea) is a poison that has been used chiefly against the Norway rat (Rattus norvegicus). The compound has been used successfully by civilian health authorities in supervised rat control programs with relatively little danger of accidental poisoning of humans and pets. Moderate quantities have been distributed by the Navy for continental and overseas use.

Antu has been made available in the form of a greyish-white powder, having no odor or other characteristic property. Experiments with monkeys indicate that the lethal dose is 120 mg. per kg.; however, data on human toxicity are lacking and precautions should be observed in handling it. Inhalation of dust should be avoided. Antu is moderately toxic for dogs, cats, and other carnivorous species, but is generally non-toxic for herbivorous species.

Animal experiments indicate that there is a direct action of the drug on pulmonary blood vessels, resulting in increased capillary permeability. Gross findings on postmortem examination consist of pulmonary edema and pleural effusion. In the event of severe poisoning, the signs and symptoms of shock may be evident. The usual treatment for shock should be instituted. Every effort should be made to induce vomiting and the stomach should be washed or pumped out. Alkalies should be avoided. Substances such as olive oil are useful to delay absorption of the drug. (Prev. Med. Div., BuMed - F. J. Shronts)

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Infectious Hepatitis: The Use of Gamma Globulin: Outbreaks of infectious hepatitis in a bombardment group based in the Mediterranean Theater of Operations and in various regiments of the ground forces in the same theater afforded opportunities to study the effectiveness of human immune serum globulin (gamma globulin) in the prevention of this disease.

The results of these field studies support the findings of Stokes and Neefe that gamma globulin is a potent agent in the prevention of infectious hepatitis and suggest that the globulin confers passive immunity for a period of at least from six to eight weeks. (Gellis et al)

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Epidemiology: Neefe and co-workers have investigated an epidemic of infectious hepatitis which occurred in a summer camp for boys and girls. They present evidence which indicates that the agent responsible for this epidemic was water-borne. Their studies also confirm the observations of others that the causative agent of infectious hepatitis is excreted in the feces of persons with the disease, and that anything subject to direct or indirect contamination with feces provides a potential means of transmission of the disease.

This appears to be the first epidemic of infectious hepatitis (not homologous serum hepatitis) in which experimental evidence of the method of transmission has been obtained. As far as is known, this also appears to be the first satisfactory evidence of the natural transmission of any virus to man by water.

The only method of determining the presence of the causative agent of infectious hepatitis in a given material is by demonstrating the ability of that material to produce hepatitis in human volunteers. Thus, the effect of disinfection on water was estimated by comparing the incidence, incubation periods and severity of hepatitis following the ingestion of treated water by volunteers with the same factors in a control group following the ingestion of untreated water.

Treatment of contaminated water with sufficient chlorine to provide a chlorine residual of 1 part per million did not inactivate or attenuate the causative agent of infectious hepatitis after thirty minutes' contact.

Treatment of contaminated water with sodium carbonate, aluminum sulfate and activated carbon did not completely remove or inactivate the agent of hepatitis. However, the treatment may have resulted in a decrease in concentration and possibly some decrease in virulence of this agent.

The concentration and/or virulence of the agent of hepatitis in water may be so affected by these procedures as to result in some modification of the disease produced. The available evidence suggests that a decrease in concentration and/or virulence may be associated with prolongation of the incubation period. A decrease in virulence also may be associated with a decrease in the severity of the disease.

The complete inactivation of the causative agent of infectious hepatitis in drinking water may require further modifications of methods currently used for disinfection of water. (J.A.M.A., Aug. 11, '45)

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Prognostic Significance of Transient Tachycardia: A statistical analysis was made of the medical records of 22,741 Army officers to determine the prognostic significance of transient tachycardia noted in the course of annual physical examinations. The indices chosen to demonstrate the relationship of transient tachycardia to the subsequent state of health and cause of death were: (1) the later development of sustained hypertension, and (2) disability retirement and death rates due to cardiovascular-renal diseases.

The frequency of transient tachycardia increased somewhat with age, up to 45, at which point a plateau apparently was reached. Its occurrence was considerably less than that found for transient hypertension. The group with transient tachycardia showed higher rates for later, sustained hypertension and for retirement because of cardiovascular-renal diseases than did the control group. The rates were similar to those for a group with transient hypertension.

In the group with transient tachycardia, the death rate from cardiovascular-renal diseases was not significantly greater than that of the controls. This was in contrast to the group with transient hypertension, in which a significant increase was demonstrated. When both transient tachycardia and transient hypertension were present, the incidence of later sustained hypertension, and of retirement and death due to cardiovascular-renal disease, was greater than when either condition was present alone. Transient tachycardia due to emotional disturbance, like transient hypertension of similar origin, is often an early sign of hypertensive vascular disease. In this respect the two conditions are of equal importance. (OEMcmr-272, Levy, Columbia Univ., CMR Bulletin #5(

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Danger from Large Consumption of Protein After Loss of Renal Tissue: After removal of three-quarters of the total renal tissue from young rats, there were no deaths when protein was not taken. However, as the amount of protein consumed was increased, there was an increasing number of deaths due to uremia. Among the survivors, there were no signs of renal failure when protein was not taken, but as the protein consumption increased the concentrations of urea and creatinine in the serum rose. At the same time the rates of urea excretion, urea clearance, and work accomplished and the amount of regenerated renal tissue were all augmented. There was, therefore, not an absolute renal failure, but a failure only in relation to the greater metabolic demand imposed.

An increased demand for work from the kidney is imposed by the parenteral injection of any protein. The degree of the load varies with the particular protein used and with the conditions under which it is administered. A little protein, not enough for maintenance, when given to rats subjected to the removal of three-quarters of their total renal tissue, reduced the serum urea

concentration, increased urea clearance, and largely prevented loss of body weight, although at the same time it imposed no more work on the kidney than when no protein was given.

In men given adequate calories, as much as 15 Gm. of protein may be added to a protein-free diet without increasing the rate of urea excretion, the serum urea concentration, or the work required of the kidney. (OEMcmr-338, Addis et al, Stanford Univ., Ms. for publication, CMR Bulletin #50)

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Treatment of the Rheumatic State by X-Ray Irradiation of the Heart and of the Sympathetic Ganglia: X-ray therapy has been proposed as one of the nonspecific methods for treating rheumatic fever. As a result of a review of the literature, it has been stated that in only one of numerous postmortem studies was damage to the myocardium found, sufficient to denote specific roentgen-ray injury. In rabbits and in dogs irradiated with moderate doses, the only clinical sign of damage noted was transitory, premature contractions; with larger doses, cell necrosis, hemorrhage and proliferation of connective tissue were found in the auricular musculature.

The Rheumatic Fever Service of the U. S. Naval Hospital, Corona, California, has undertaken an evaluation of X-ray irradiation in the treatment of rheumatic fever. Two hundred and twenty-nine patients, all of whom had well-established rheumatic fever of a duration of six months or more were selected as subjects. Twenty-eight patients did not complete the prescribed course of treatment. Of these, three were dropped from the study because of untoward symptoms attributable to the X-ray irradiation (a feeling of precordial heaviness in one and excessive nausea in two). Twenty-five patients were lost through discharge from the Service or through transfer to a convalescent unit too far removed for continuance of the study.

The evaluation of the remaining 201 patients consisted of a careful review of the history, a recheck of the physical examination, a study of the clinical course and comparison of weekly electrocardiograms and blood sedimentation rates. All routine treatments including rest, diet, salicylates, helio-therapy and educational, occupational and physical therapy were continued.

Under the direction of the roentgenologist, the 201 patients were divided into three groups:

Group A received 100 r through the myocardium at weekly intervals for five successive weeks.

Group B received 100 r through the myocardium and over the middle and lower cervical sympathetic ganglia every week for five successive weeks.

Group C received no actual X-ray therapy but went through the same mechanical routine as groups A and B. A lead filter was used to block out the roentgen rays.

A well-trained X-ray technician carried out the above-outlined schedule. Neither the roentgenologist, the clinicians, nor the patients knew into which group individual patients were placed by the technician.

No significant change in the degree of activity of the disease process was noted in any of the three groups. Re-evaluation at the end of 12 weeks and 26 weeks showed no improvement in the treated groups over that of the untreated group. There was no demonstrable therapeutic value from X-ray therapy in the primary or in the recurrent attacks of rheumatic fever. It is believed, therefore, that X-ray therapy is not a useful adjunct in the treatment of rheumatic fever. (Rheumatic Fever Unit, Nav. Hosp., Corona - G. C. Griffith and E. P. Halley)

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Vertigo: The momentary light-headed feeling experienced by many people after rising from bed quickly or after straightening up quickly is common, but seldom demands medical attention. It is presumably due to temporary cerebral anemia. The "swimming in the head", described by some patients with hypertension and arteriosclerosis also is probably due to disturbance in the cerebral circulation. The term "giddiness" seems best to describe such sensations.

True vertigo, rather than giddiness, leads patients to seek medical advice. Vertigo is the type of dizziness which is likely to be disabling or alarming, if not incapacitating. Fortunately, it presents characteristics which are usually so typical that the diagnosis can hardly be mistaken if time is taken to obtain an adequate history.

The first characteristic is the sensation of revolving. Secondly, the dizziness almost always comes in spells which start suddenly; it may end suddenly or subside gradually. It may last only a moment or it may persist for many hours or even days. In exceptional cases the dizziness seems to persist indefinitely. Dizziness is provoked or aggravated by a sudden change in position affecting the head only. This can be distinguished from the giddiness resulting from sudden change in the position of the entire body. Finally,

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true vertigo is sometimes accompanied by nausea and vomiting, depending on the intensity of the complaint.

True vertigo results from changes in the internal ear, or nerve pathways from the ear. Therefore, it is also called labyrinthine, auditory, or aural vertigo. The term labyrinthine vertigo is preferred. The mechanism concerned with the control of balance apparently becomes oversensitive or irritated. In the majority of cases there is no indication of the exact nature of the disorder, but infection, local changes resulting from allergy, and changes in the circulation, including hemorrhage, have all been held responsible. The terms "toxic vertigo" and "labyrinthitis" are commonly used. They convey an impression regarding etiology which can be only speculative. For this reason they may be considered less desirable than the purely descriptive label "labyrinthine vertigo."

Meniere's syndrome is manifested by the type of vertigo described above and by two additional symptoms, tinnitus and impairment of hearing. The tinnitus varies from a gentle sound to an intolerable uproar. It may cause even greater distress than the vertigo, unless the latter is actually disabling. Impairment of hearing may occur at the same time as the vertigo, and may subside when the attack of vertigo has passed. Tinnitus may also occur with the attacks of vertigo, but it is quite common for these three manifestations of Meniere's syndrome to run an independent course. They are not affected in the same way by therapeutic measures.

Labyrinthine vertigo is readily diagnosed from these characteristics as they are described by the patient. Its recognition is most important to avoid erroneous diagnosis of functional nervous disorders, hypoglycemia or hypoglycosis, petit mal, cerebral arteriosclerosis and cerebral vascular accident. Such errors in diagnosis may lead to no real harm, but may result in needless anxiety and futile restrictions.

It is a serious error to overlook local disease in the ear needing active treatment. Still more serious is failure to discover an acoustic neuroma of which true vertigo is a symptom. Here the vertigo is likely to be persistent, never subsiding entirely. When far advanced, the tumor also produces loss of hearing, headache, and numbness in the cheek. The examination may disclose choked disks and hypesthesia of one side of the face. Early recognition is essential to avoid damage from increasing intracranial pressure. Fortunately, this is one of the types of brain tumor considered to be curable.

Vertigo will usually subside without any treatment. In fact, many cases of labyrinthine vertigo are untreated because they are so mild that the patient

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does not seek medical attention. In the past, the most common treatment employed was administration of a mild sedative such as phenobarbital. While not curative, it was hoped that this might permit the patient to tolerate his complaint with less concern, thus interfering to a minimal degree with his work and activities.

Methods of treatment have been described in publications by Bartels, Latrhop and Horrax. The plan of treatment often used in recent years at the Lahey Clinic is the low sodium regimen introduced by Furstenberg, Lashmet and Lathrop, which reduces the sodium intake to the minimum. The patient is given advice which may be summarized as follows: "Avoid salt. Do not add salt to the food at the table. Do not use foods which contain much salt, such as salt fish, or meat, and salted peanuts. Use butter sparingly unless it is prepared without salt. Do not take baking soda or any medicine containing any sodium compound such as sodium citrate, sodium bromide and sodium bicarbonate." The low sodium diet is supplemented by administration of ammonium chloride or potassium chloride. (Advantages of the latter have been claimed by Talbott and Brown.) It is customary to give one or the other of these compounds in 5 or 7.5 grain tablets, using three or four tablets after meals, five days each week. The dosage may be modified according to the needs of the individual case. Some patients require as much as 120 grains daily for prolonged periods and without interruption. Caution should be exercised to avoid cumulative effects, resulting in acidosis, particularly in older patients who may have impairment of renal function. The results of this treatment have been more favorable than any other form of medicinal therapy. For resistant cases, other measures are to be considered.

Intravenous administration of histamine has been found by Horton to be effective in checking prolonged attacks of vertigo. A series of intravenous injections, followed by subcutaneous injections, has also been employed to prevent recurrence. Atkinson has substantiated the value of histamine therapy in cases in which he found a positive skin reaction from intradermal injection of histamine. In cases not presenting this reaction, he proposed the use of nicotinic acid in large doses to bring about vasodilatation.

In spite of all forms of medicinal therapy, some patients continue to have attacks of vertigo so prolonged and so frequent that disability results. Some patients live in terror that the slightest movement of the head, made without the greatest deliberation, may lead to an attack. In such cases, surgery offers complete relief. Section of the vestibular division of the eighth cranial nerve has been undertaken, with gratifying results. This procedure, introduced by Dandy in 1928, has become a standardized operation with all neurosurgeons.

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Labyrinthine vertigo is an important clinical problem which can usually be recognized easily, but it may also present difficulties in diagnosis which demand cooperative study by internist, neurosurgeon, otologist and roentgenologist. Medicinal treatment is effective in the majority of cases, but when the condition is refractory and disabling, cure by neurosurgery can be expected. (Lahey Clinic Bull., April '45 - Allan)

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Personality Changes Induced by Low Intake of B Vitamins: A series of experiments has been conducted by Brozek and co-workers on the relationship between experimentally varied levels of intake of B-complex near those recommended by the National Research Council. The experimental group (8 men) received about one-third of the recommended allowances of thiamine and riboflavin and two-thirds of the recommended amount of niacin during the period of partial restriction (161 days). In the period of acute deficiency (23 days) there were only negligible amounts of B-complex vitamins in the diet. Personality was appraised repeatedly by having each subject record ratings of himself and the other subjects, and by the use of the Minnesota Multiphasic Personality Inventory, the Rorschach test, and the Cursive Miniature Situations (CMS) test of Cattell.

No significant evidence of personality change was found in any of the men during the long period of partial restriction, although the Rorschach and CMS test provided evidence of very slight changes, paralleling the slight increases which were observed in the resting level of pyruvic acid in the blood of subjects on low vitamin intake.

During the acute deficiency period, all of the tests gave indications of important personality changes. The Minnesota Inventory showed significant alterations of the 3 psychoneurotic scales (depression, hysteria, and hypochondriasis). The Rorschach test showed a striking loss of "spontaneity" and increase in "tension". The CMS test revealed an increase in "emotionality" and "timidity", but those indices which distinguish psychotic from normals showed no changes. The alterations in personality were among the earliest symptoms which became apparent in the thiamine-deficient subject. (OEMcmr-27, Univ. of Minn., Ms. for publication, CMR Bulletin #50)

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Subphrenic Abscess, with Special Reference to Intrathoracic Complications: Subphrenic abscess may occur after any abdominal operation or any inflammatory process in the abdomen. Thoracic complications, which are late complications of subphrenic abscess, are responsible for the high mortality rate of

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this condition. Early recognition and treatment of subphrenic abscess will prevent thoracic complications.

The diagnosis is not difficult in most instances. A history of an abdominal condition which could cause a subphrenic abscess, and evidence of a suppurative process manifested by fever and elevation of the leucocyte count which cannot be accounted for otherwise, are sufficient to warrant investigation. Anteroposterior and lateral roentgenographic views of the diaphragm with the patient in the erect position are of greatest value. The presence of a fluid level under the diaphragm was demonstrated in this manner in about 25 per cent of cases reviewed by Clagett and Tinney. Marked elevation and immobility of the diaphragm were significant. These reviewers state that it is generally agreed that diagnostic aspiration should never be attempted in cases of suspected subphrenic abscess. The subphrenic region is not anatomically suited to such procedures as it is necessary to traverse either the peritoneal or pleural cavities with the needle in such cases, and the danger of establishing infection in these cavities is very great. Furthermore, failure to obtain fluid proves nothing.

Exploratory operation is without question the logical and safe procedure in cases of suspected subphrenic abscess. The extraserous approach to subphrenic abscesses is the safest and most effective means of treating them.

The approach to abscesses situated anteriorly, as indicated by the lateral roentgenogram, is made by an incision just below the costal arch. The incision is carried down through the muscle and posterior fascia to the peritoneum. A line of cleavage is established just outside of the peritoneum and, by blunt dissection, the peritoneum is stripped from the under surface of the diaphragm until the induration and fluctuation of the abscess are demonstrated. An opening is then made into the abscess, sufficiently large to establish adequate drainage.

For abscesses situated posteriorly, it is necessary to resect the twelfth rib. Melnikoff has demonstrated that in about 62 per cent of cases the pleura extends to the twelfth rib, but it never extends as low as the spine of the first lumbar vertebra. Therefore, a transverse incision is made across the periosteal bed of the twelfth rib at the level of the first lumbar spine. By blunt dissection a line of cleavage is established below the diaphragm but outside of the fascia enclosing the kidney and adrenal glands, and the dissection is extended until the abscess is reached.

These approaches can be carried out quickly and easily even with patients who are extremely ill. Rapid improvement takes place after the establishment

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of adequate external drainage, and in cases complicated by bronchial fistula, the fistula closes and the cough clears up. If a bronchial fistula has been present for some time before drainage of the subphrenic abscess is established, bronchiectasis may develop from chronic inflammatory changes in the bronchi, even though the abscess heals satisfactorily. This fact indicates further the importance of early diagnosis and drainage of subphrenic abscess. (Am. J. Surg., Nov. '44)

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(Not Restricted)

The Treatment of Burns from White Phosphorus: Extensive burns may be produced by incandescent particles of white phosphorus from munitions of various types and composition. Such burns are usually multiple, deep and variable in size. Particles of white phosphorus remaining in the wound continue to burn in the presence of oxygen, and are recognizable by the evolution of smoke. Other particles of phosphorus may be located by their phosphorescence in the dark, and they should be removed under water unless copper sulfate solution has been applied. When copper sulfate is applied to the wound, a noninflammable coating of black copper phosphide is formed on remaining particles.

Copper sulfate pads (Stock No. S2-1373), in individual units containing 3 pads, are available for use in burns from white phosphorus. These terry towel pads contain approximately 1 gram of copper sulfate and are used in the following self-aid procedure: (1) douse burn with canteen water; (2) wet pad with canteen water; (3) press wet pad directly onto the white phosphorus particles, then squeeze liquid from pad over the burned area; (4) carefully pick out copper sulfate-coated particles of white phosphorus from the skin with a knife, bayonet, match stick or the pad itself; (5) discard the pad; (6) do not use the pad as a dressing for the burn after the phosphorus is removed.

If the copper sulfate pads are not available, burned areas should be immersed immediately in water or covered with dressings soaked in water, urine or any non-irritant aqueous solution. This soaking should be continued until a 5 per cent solution of copper sulfate can be applied as a wet dressing. The copper sulfate wet dressing should not be allowed to remain on the wound as the copper sulfate will be absorbed and produce systemic toxicity. One case of copper poisoning has been reported to the Bureau as a result of the use of copper sulfate dressings for 90 minutes over a phosphorus burn involving 10 per cent of the body surface. Another instance is reported of several cases of phosphorus burns in which the phosphorus started to burn 4 days after the time of injury when the dressings were removed. This was due to failure to coat the phosphorus particles completely with copper sulfate and the failure to remove embedded particles from the tissue.

(Not Restricted)

The burn should be debrided promptly, if the patient's condition will permit, in order to remove bits of phosphorus which might be later absorbed and produce systemic poisoning. Following removal of the particles, the lesions are treated as thermal burns. An ointment with an oily base should not be applied until it is certain that all phosphorus has been removed.

Clothing of cotton twill cloth affords better protection against penetration of incandescent phosphorus than does cotton wool serge. (Res. Div., BuMed - J. Basman)

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(Not Restricted)

Gastric or Duodenal Ulcer as a Complication of Fracture: Postoperative hematemesis occurs occasionally. In 1931 in the surgical clinic of the University of Minnesota Medical School, it became standard practice to apply suction to indwelling duodenal tubes to prevent intestinal distension in all patients undergoing abdominal operations. With the institution of this practice, unexpected hematemesis during convalescence disappeared as a postoperative complication. It was reasoned that aspiration of the gastric secretion and avoidance of distension, particularly in patients with peritonitis, were largely responsible for the elimination of this occasional postoperative complication.

In 1940, severe hematemesis was observed in a patient who had multiple fractures, and four additional such occurrences have been observed in patients without a history of previous gastrointestinal disease. This led to an examination of the postmortem records in the Department of Pathology of patients dying following fracture. A fairly large number of cases was uncovered in which ulcer or gastric erosions were encountered at autopsy.

It is suggested, therefore, that hematemesis due to gastric erosion or ulcer accompanying fracture occurs frequently enough to merit description. The two most likely causes of the ulceration would appear to be: (1) fat embolism and (2) a histamine effect upon gastric secretion.

Gastric and duodenal erosions or ulcers in experimental animals have been produced as a consequence of experimental fracture or curettement of long bones. (Bull. Am. Coll. Surg., Feb. '45 - Wangensteen et al)

* * * * * *

Tourniquet Shock in Dogs after Ligation of Vena Cava: It has been shown that shock can be induced in dogs by the application of tourniquets to the hind legs for only 2 hours when the occluded extremities are exposed to a temperature

of 47° C. during this period. Recent studies indicate that ligation of the abdominal aorta and vena cava of normal dogs does not result in any change in blood pressure during several hours of observation and that the general condition of the animals is good at the end of 48 hours. On the other hand, when the abdominal aorta and vena cava were ligated immediately preceding the release of tourniquets that had been applied to the hind legs for 2 hours with the extremities immersed at 47° C., the blood pressure dropped promptly in all cases and reached shock level in from 40 to 80 minutes.

In other experiments, the ligated vena cava was connected to the proximal end of the external jugular vein of a normal dog, while that dog's carotid artery was connected to the distal end of the severed aorta. Release of the tourniquets, after they had been in place 2 hours with the occluded extremities at 47° C., was accompanied again by rapid development of shock in the tourniquet animal but by no signs of shock in the normal dog.

This result was unexpected in view of the fact that most of the blood from the damaged legs was separated from the general circulation of the injured dog and transferred to the normal animal. (OEMcmr-341, Mylon and Wilhelmi, Yale Univ., CMR Bulletin #47)

* * * * * *

Effects of Increased Intrapulmonary Pressure on Dark Adaptation: Sheard has studied the effect of increased intrapulmonary pressure on the threshold levels of cone and rod adaptation. With positive pressures of 4 or 8 inches of water (7.5 and 15 mm. mercury) at altitudes above 36,000 feet, there is a maintenance of maximal sensitivity to light and of the best levels of rod and cone adaptation which are possible under the condition imposed. At high altitudes (42,000 feet) without increased intrapulmonary pressure, there may be a change of from 0.75 to almost 1 log unit in the rod threshold, indicating a five- to tenfold increase in the amount of light needed to produce a response as compared to the threshold values at ground level.

In general, there is less effect of pressure breathing on cone adaptation than on rod adaptation, since there is a greater effect of anoxia per se on the rods in the periphery than on the cones at the macula. These investigations show that, with increased intrapulmonary pressure at high altitudes, it is generally possible to maintain the threshold levels of rods and cones at the same values respectively as were obtained initially at ground levels while breathing air or at altitudes under 30,000 feet while breathing oxygen. (OEMcmr-129, Mayo Clinic, CMR Bulletin #47)

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The Relationship of the Size of Calomel Particles to Effectiveness in Ointments: An experiment was carried out, using rabbits, to evaluate the effect of the size of calomel particles upon the efficacy of calomel ointment in prophylaxis of syphilis. Three different ointments containing calomel powder were used, in which the sizes of the particles were 100 micra, 5 micra, or 1 micron. Different doses of each of the 3 ointments were applied to the areas of inoculation 1 hour after syphilitic testicular emulsion had been rubbed into a superficial cutaneous scratch on the back of each rabbit. Proof of protection, or lack of it, was obtained by careful observation of the rabbits for chancre formation, and with negative animals by transfer of popliteal lymph nodes six months later.

The experiment showed that much greater protection was obtained with the ointments containing the smaller particles, the ointment containing particles of 100 micra being relatively ineffective. The results also seemed to give some indication that under the conditions of this experiment, the local action of calomel was more important than the systemic action. (OEMcmr-325, Fleming and Wolfe, Univ. of N.C., Ms. for publication, CMR Bulletin #50)

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Immunological Studies of the Flexner Dysentery Bacillus: Antisera prepared by prolonged immunization of rabbits with Shigella paradysenteriae (Flexner), Type III, contain mouse protective antibodies which can be removed by absorption with the chemically purified, type-specific antigen. Absorption of the serum with the polysaccharide portion of the antigenic complex removes approximately from 80 to 90 per cent of the precipitating and protective antibodies.

Most, if not all, of the protective antibodies present in Type III dysentery antiserum are directed against the homologous specific antigen. Any protective antibodies reactive with other constituents of the bacterial cell appear to have little or no significance in the immune response. The polysaccharide hapten is the most important component of the antigenic complex in orienting the protective and precipitative antibodies. (OEMcmr-216, Perlman et al, Rockefeller Inst. for M. Res., Ms. for publication, CMR Bulletin #51)

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Bactericidal Properties of Substances which Stabilize Albumin Solutions: Luck has investigated the bactericidal properties of caprylate, mandelate, and acetyltryptophane, using Staph. aureus, E. coli, and E. typhosa. With inocula of from 2000 to 2500 organisms per c.c. in solutions of 25 per cent serum albumin containing caprylate, it was found that a period of 6 hours at 56° C. was sufficient to bring about complete sterilization of the cultures. The

control solutions (albumin without caprylate) still contained many organisms. With Staph. aureus, 0.025 M caprylate was required. At 65° C. and with 0.02 M caprylate a period of heating of 15 minutes was sufficient to kill all organisms as well as the vegetative form of B. subtilis. Spores of this organism, however, were found to be much more resistant. With 0.04 M mandelate or 0.04 acetyltryptophane a period of 15 minutes heating at 65° C. was not enough to kill the either the vegetative form or the spores of B. subtilis. (OEMcmr-179, Stanford Univ., CMR Bulletin #52)

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Interference of Inactive Influenza Virus with Propagation of the Active Agent: Experiments on the interference of the growth of influenza virus by inactive virus in chick embryos were concerned mainly with the specificity of the phenomenon, the nature of the interfering agent, and the mechanism of the reaction, including effects on the host cells. Experiments using mice failed to show more than suggestive evidence that this phenomenon may occur in this species. Attempts to produce interference in man, employing experimental infection for the test, were unsatisfactory. However, final judgment as to the possible application of the interference phenomenon to prophylaxis of influenza should be postponed until further tests have been made under epidemic conditions.

Analysis of data on experimental infection of humans with influenza viruses has revealed certain differences among different strains of virus. Toxic properties of influenza viruses have been demonstrated upon either intracerebral or intra-abdominal injection of active virus preparations into mice. The possibility of reactions caused by toxic properties of the viruses should be considered in the interpretation of any experimental results.

It has been shown that the addition of Falba and mineral oil to influenza vaccines improves their antigenicity, inducing an antibody response of high level which is maintained for at least one year. Protection against the disease may last, therefore, for two winters following the use of vaccines so treated, in contrast to the usual experience with vaccines suspended only in salt solution. (OEMcmr-360, Henle, Children's Hosp., Phila., CMR Bulletin #50)

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(Not Restricted)

Classified Advertising for Veteran Physicians: At a recent meeting of the American Medical Association in Chicago, it was decided to offer without charge to physicians separated from the military service under honorable conditions the opportunity to place classified advertisements in The Journal of the American Medical Association. Such advertisements will be limited to

(Not Restricted)

one insertion of thirty-five words and may be devoted to the search for assistantships, residencies, partnerships, office space, or to other possibilities listed regularly in the classified columns of the J.A.M.A. The advertisements will, of course, be limited by the same rules that now apply to all classified advertising. They will be inserted under the appropriate headings in this department of the J.A.M.A. The opportunity for such utilization of the classified advertising columns will continue until December 31, 1945. (Current Comment, J.A.M.A., Oct. 6, '45)

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(Not Restricted)

Public Health Foreign Reports:

Disease	Place	Date	Number of Cases
Plague	British E. Africa, Kenya	July 21-28, '45	12
	Egypt	July 14-Aug. 4, '45	10 (3 fatal)
	Great Britain, Malta	Aug. 11-18, '45	3
	Morocco (French)	Aug. 1-20, '45	97
	Palestine, Tel-Aviv.	Aug. 11-18, '45	1
	Peru	July '45	4
Smallpox	British E. Africa Tanganyika	July 14-28, '45	309 (17 fatal)
	Ceylon	July 28-Aug. 12, '45	95 (15 fatal)
	Rhodesia, Northern	July 14-28, '45	550 (2 fatal)
	Sudan (French)	July 21-31, '45	109
	Uruguay	July '45	86
Typhus Fever	Egypt	July 14-Aug. 4, '45	262 (46 fatal)
	Iran	March 31-May 11, '45	222
	Morocco (French)	Aug. 1-20, '45	415
	Turkey	Aug. 18-25, '45	27
Yellow Fever	Gold Coast, Winneba	Aug. 8, '45	1 suspected
		Aug. 22, '45	1

(Pub. Health Reps., Sept. 14 & 21, '45)

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(Not Restricted)
BUMED TW:FL
QB/L11-3
11 September 1945

To: AlNavStas and MarCorpsStas(having Medical Department Activities).

Subj: Destruction of Drugs and Medicines considered Dangerous to Public Health.

Refs: (a) BuMed Instructions for Redistribution and Disposal of Surplus Property (Revised 25 February 1945).
(b) BuMed ltr BUMED TW:FL QB/L11-3 dated 26 July 1945.

1. Reference (a), Part V, Par. 3 (a) states in part, "No items shall be declared Bureau surplus to NMR&DA by local activity or sold as 'Nominal Quantities' until the activity Senior Medical Officer has examined the items and executed a statement that disposal of such items through regular commercial channels will not endanger public health."

2. Reference (b), paragraph 2 (e) states in part, "Any property in the Navy's possession may be destroyed or abandoned upon a finding by a responsible officer, approved by a reviewing authority of NMR&DA, that such destruction or abandonment is required by considerations of health, safety, or security."

3. When residual drugs and medicines in greater than "small lots" exist after redistribution has been completed at the District level, these residuals will be reported to NMR&DA for declaration to a disposal agency only after each lot number of each drug or medicine has been carefully examined and the responsible medical officer can, without any doubt, execute a statement that the declared drug or medicine will not endanger public health. This statement shall be securely fastened to each form SWPA-1 or SPB-1 forwarded to NMR&DA or BuMed (MatDiv). If, for any reason, such statement cannot be executed, the drug or medicine will be recommended for destruction on SWPA-1 or SPB-1 and forwarded as outlined in reference (b). Local Naval Laboratory facilities, when available, may be utilized to determine suitability of material for medicinal usage.

4. Defaced labels, ill-fitting closures, punctured or rusted tins, rupture or break in packaging, age, change in physical characteristics, or expiration of potency date will be considered prima-facie evidence that the contained material is dangerous to public health.

5. No excess drugs and medicines will be forwarded to NMSD, Brooklyn for test without prior specific authority in each instance from BuMed (MatDiv). No personnel of the Medical Department, except those attached to Materiel Division, will at any time request physical, chemical, or biological test of any Medical Department property by a civilian or other government laboratory.

6. When "small lots" of excess drugs or medicines remain at a naval activity after redistribution at District level has been completed, these residuals will be disposed of locally in a sound, economical manner. As the administrative costs involved in reporting, declaring, cataloging and selling "small lots", usually exceed the probable minor financial return to the Treasury of the United States, "small lots" will not be reported to higher echelon for disposal.

7. Nothing in this letter relates to disposition of excess narcotics or other exempt items. All exempt items, will be transferred to nearest element of the Naval Medical Supply System as directed in reference (a).

--BuMed. Ross T. McIntire.

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(Not Restricted)
BuMed-Y-HS
P2-1/FS
11 September 1945

To: All Ships and Stations.

Subj: Disinsectization of Surface Craft.

Ref.: (a) BuMed ltr. Y:hs, S36-5/FS(013), of 21 Jan. 1943; N. D. Bul. Cum. Ed. 1943, 43-325, p. 459.

Enc.: (A) Malaria-Free Area.

1. Reference (a) is hereby canceled, and the enclosure reprinted herewith.

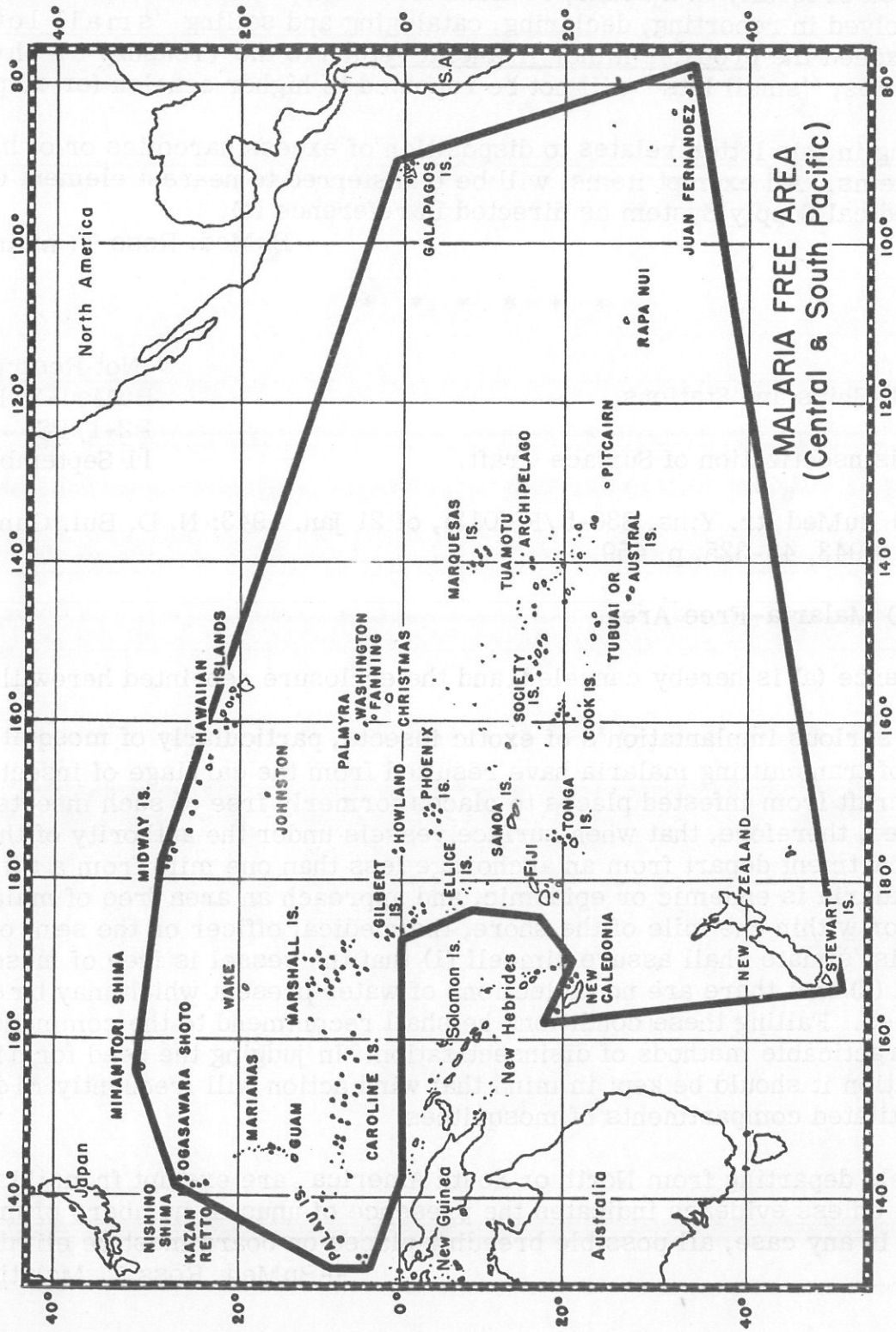
2. Many serious implantation's of exotic insects, particularly of mosquitoes capable of transmitting malaria have resulted from the carriage of insects by surface craft from infested places to places formerly free of such insects. It is directed, therefore, that when surface vessels under the authority of the Navy Department depart from an anchorage less than one mile from a shore where malaria is endemic or epidemic, and approach an area free of malaria and anchor within one mile of the shore, the medical officer or the senior pharmacist's mate shall assure himself (1) that the vessel is free of mosquitoes, and (2) that there are no collections of water present which may breed mosquitoes. Failing these conditions he shall recommend to the commanding officer practicable methods of disinsectization. In judging the need for disinsectization it should be kept in mind that wind action will frequently rid well-ventilated compartments of mosquitoes.

3. Vessels departing from North or South America are exempt from this directive unless evidence indicates the presence of unusual numbers of mosquitoes. In any case, all possible breeding places on board must be eliminated.

--BuMed. Ross T. McIntire.

(Not Restricted)

ENCLOSURE (A)



(Not Restricted)
Op13-1D-psp
Serial 523913
5 September 1945

To: All Ships and Stations.

Subj: U. S. Naval Special Hospital, Camp Wallace, Texas - Establishment of.

1. The grounds, buildings, utilities, and accessories comprising medical - department facilities at Camp Wallace are hereby established under a medical officer in command and designated:

U. S. Naval Special Hospital,
Camp Wallace, Texas. 3460 380

This is an activity of the Eighth Naval District, under the technical control of the Bureau of Medicine and Surgery.

2. Bureaus and offices concerned take necessary action.

--SecNav. James Forrestal.

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ALNAV 231

(Not Restricted)
BuMed. 31 August 1945

Subj: Transfer of Serum Albumin.

Effective immediately all continental U. S. shore establishments, all extra-continental shore establishments outside the Pacific Theatre of Operations, and all vessels operating outside the Pacific Theatre of Operations will transfer all stocks of serum albumin, Medical Department Supply Catalog number S1-1945, to either Naval Medical Supply Depot, Oakland, California, or Naval Medical Supply Depot, Brooklyn. The use of serum albumin restricted to Pacific Theatre.

--SecNav. James Forrestal.

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(Not Restricted)
BuMed-Fa-HFM:hwl
L1-2/EN10(073)
27 August 1945

To: All Ships and Stations.

Subj: Object and Subobject Classification of Medical Department Appropriational Estimates, Obligations and Expenditures.

Ref: (a) BuMed ltr. BuMed-Fa-HFM:hwl, L1-2/EN10(073), of 7 July 1945; N. D. Bul. of 15 July 1945, 45-801, and NavMed 855 (reprint from N. D. Bul. of 15 July 1945.)

1. Paragraph 6 of reference (a) is hereby amended to include the following corrections, which shall be made upon receipt of this letter:

Subobject Symbol and Title	Correction to be made
0302-Tolls and Ferriages	Change BuSandA Manual reference from 940-50(6) to 940-50.
0796-Subsistence Service	Between "ship" and "from" in second line insert: "and at stations other than naval hospitals".
0894-Maintenance Supplies, Materials and Parts	Insert comma after "Parts" in the title and add: "General".
093-Other Furniture, Furnishings and Equipment	Delete the last two lines of the last paragraph and substitute: "major additions thereto and major replacements thereof shall be reported under 104, Fixed Equipment. Minor additions and minor replacements shall be reported under 0894, Maintenance Supplies, Materials and Parts, General, when procured for installation by hospital or depot maintenance force; under 0794, Maintenance and Repair Services, General, when accomplished as an incidental part of maintenance and repair projects being accomplished by contract, by a Naval or Marine Corps activity or by another government agency".
0994-Maintenance Machinery and Equipment, General	Item 2, Fire Protection Equipment, change last paragraph to read: "Initial outfits, additional items and major replacements of fire hose, hand extinguishers, fire hooks, axes, nozzles, etc., are properly chargeable to this subobject; minor replacements to 0894".
104-Fixed Equipment	First paragraph-Between "awnings" and "screens" insert: "window

shades, Venetian blinds". In first line of second paragraph change "are" to "is".

109--All other Land and Structures

After 104-Fixed Equipment, add: "109-All Other Land and Structures."
--BuMed. Ross T. McIntire.

* * * * * *

To: All Ships and Stations.

Op-05-G11/ztl
Serial 95805-G
30 August 1945

Subj: Inspection and Removal of BuMed Property From Naval Vessels Designated To Be Placed in Reserve or Out of Commission Upon Their Return to the United States.

Ref: (a) U. S. Navy Regulations, art. 1170.

1. With the surrender of Japan, certain naval vessels are expected to be designated to be placed in reserve and out of commission in the various districts.

2. In order to assist in the inspection, removal, destruction, and proper disposition of medical supplies and material from these ships, the Bureau of Medicine and Surgery will direct the commandants of naval districts to organize medical supply clearance teams headed by experienced Medical Department officers from the medical personnel within their respective districts for this duty.

3. These teams will make necessary inspection of ships designated by commandants. Teams will be responsible for the inspection, removal, destruction, or other proper disposition of all medical supplies and property on ships designated. Final disposition of medical supplies and material will be in accordance with directives issued by the Bureau of Medicine and Surgery.

4. In order that the inspection and proper disposition of medical supplies and materials will be expeditiously carried out, commanding officers are directed to cooperate and assist the teams as requested by the senior medical officer making inspection.

--OpNav. W. S. Farber.

* * * * * *

To: All Ships and Stations. (Not Restricted)
BuMed-Y-rf
Subj: Instructions for the Use of Forms NavMed-H-6 and NavMed-H-7. P3-5/P3-1
30 August 1945

Ref: (a) Par. 2350, Manual of the Medical Department.

Encls: (A) Revised Syphilitic Abstract (new title:"Venereal Disease Abstract"), Form NavMed-H-6.
(B) Revised Abstract of Antiluetic Treatment, Form NavMed-H-7.

1. Reference (a) is hereby canceled and paragraph 3 (a) and (b) are to be substituted therefor. The advent of penicillin therapy for gonorrhea and syphilis has made necessary a revision in Forms NavMed-H-6 and NavMed-H-8 and a provision for retaining venereal-disease histories in the health record.

2. NavMed-H-6 (Enc. (A)) becomes a venereal-disease abstract rather than a syphilitic abstract. NavMed-H-7 (Enc. (B)) provides for better recording of treatment other than arsenical and heavy metals (i.e., penicillin).

3. Instructions for the use of Forms NavMed-H-6 (Venereal Disease Abstract) and NavMed-H-7 (Abstract of Antiluetic Treatment) are as follows:

(a) NavMed-H-6 (Venereal Disease Abstract). - NavMed-H-6 (Venereal Disease Abstract) shall be prepared and inserted immediately following NavMed-H-5 in the health record for each person upon each admission (A, ACD, AD, and EC) to the sick list for venereal disease. Each patient taken up as Readmission (RA) shall have appropriate entries made on the abstract prepared for the original admission upon which the RA is based. NavMed-H-6 shall not be placed in the health record of an individual for whom a diagnosis of venereal disease has not been made. All entries on NavMed-H-6 are intended for the information of medical officers under whose care the case may come. To this end care must be used to insure accuracy and completeness. Each medical officer under whom the case may come shall be responsible for the continuance of the abstract. When a NavMed-H-6 is inserted in a health record an entry with the diagnosis and date of admission shall be made on NavMed-H-8. No other entries concerning venereal disease shall be made on NavMed-H-8.

(b) NavMed-H-7 (Abstract of Antiluetic Treatment).--NavMed-H-7 (Abstract of Antiluetic Treatment) shall be prepared and inserted following NavMed-H-6 in the health record for each person for whom a diagnosis of syphilis or any of its complications or sequelae has been made. Entries shall be made for each course of treatment given and each laboratory examination made. The medical officer shall carefully and fully explain to the patient the nature of the infection and the necessity for treatment and prolonged observation including several tests, for assurance of a cure.

After so informing the patient, the medical officer shall sign the statement on the reverse side of the NavMed-H-7.

4. Revised Forms NavMed-H-6 and NavMed-H-7 will be stocked at all naval medical supply depots and storehouses and will be listed in the Medical Supply Catalog as follows:

Stock No.	NavMed	Item Title	Unit
S16-340	H-6	Venereal Disease Abstract	Sheet
S16-360	H-7	Abstract of Antiluetic Treatment	Sheet

Supplies will become available on or about 1 October 1945. Requisitions shall be made at once for a year's supply estimated on the basis of the ship or station venereal disease rate per 1,000 for the year 1944 plus 30%.

5. Immediately on receipt of the revised forms all stocks on hand of the old Forms NavMed-H-6 and NavMed-H-7 shall be destroyed.

--BuMed. W. J. C. Agnew.

Enclosure (A)

VENEREAL DISEASE ABSTRACT

NAVMED—H-6 (REV. 7-45)

NAME (*Surname*) | FILE OR SERVICE No.

(*Christian Name(s)*)

BIRTHPLACE | BIRTH DATE

DIAGNOSIS (*Disease*) | NAVY DIAG. No.

LABORATORY EVIDENCE (*as indicated*)

		TEST (*Name*)	REACTION	DATE
SEROLOGY	BLOOD			
	SP. FL.			
DARKFIELD	☐ Pos. ☐ Neg.			
SMEAR	☐ Pos. ☐ Neg.			
CULTURE	☐ Pos. ☐ Neg.			
FREI TEST	☐ Pos. ☐ Neg.			

CLINICAL DATA

TREATMENT SUMMARY*

(*Drug, dosage, route of administration, reaction, etc.*)

CRITERIA OF CURE

DISPOSITION

VENEREAL DISEASE ABSTRACT (Back) NAVMED-6 (REV. 7-45)

**Exclusive of syphilis.* 16—45708-1 ☆ U. S. GOVERNMENT PRINTING OFFICE

Enclosure (B)

ABSTRACT OF ANTILUETIC TREATMENT

NAVMED-H-7 (REV. 7-45)

NAME ________ (Surname—Christian name(s)) BIRTH ________ (Place) ________ (Date) FILE OR SERVICE NO. ________ 16—45715-1 GPO

PLACE (Ship or station)	DATE OF EACH COURSE FROM—	DATE OF EACH COURSE TO—	ARSENICALS DRUG	ARSENICALS NO. INJECTIONS	ARSENICALS TOTAL AMT. (GM.)	HEAVY METALS DRUG	HEAVY METALS NO. INJECTIONS	HEAVY METALS TOTAL AMT. (GM.)	OTHER TREATMENT DRUG-AGENT	OTHER TREATMENT ROUTE I. V., I. M., ETC.	OTHER TREATMENT TOTAL DOSAGE UNITS	OTHER TREATMENT TOTAL DOSAGE MG.	SIGNATURE OF EACH MEDICAL OFFICER TREATING CASE

REACTIONS (State date, type and severity, and sign each entry) ________

SEROLOGICAL EXAMINATIONS

TYPE	TEST (Name)	RE-ACTION	DATE	LABORATORY WHERE MADE
BLOOD				
SP. FL.				
BLOOD				
SP. FL.				
BLOOD				
SP. FL.				
BLOOD				
SP. FL.				
BLOOD				
SP. FL.				
BLOOD				
SP. FL.				
BLOOD				
SP. FL.				
BLOOD				
SP. FL.				

STATEMENTS

The nature of syphilis has been explained to the patient. He has been informed that treatment and prolonged observation, including several tests, are required for assurance of a cure.

________ (Date) ________ (Signature of medical officer)

ABSTRACT OF ANTILUETIC TREATMENT (Back) 16—45715-1

NAVMED-H-7 (REV. 7-45)

CH PHARM CLARK S FITZHUGH USN RET

BUREAU OF MEDICINE AND SURGERY,
NAVY DEPARTMENT,
WASHINGTON, D.C.

BLDG. 3, ROOM 1 X